EXHIBIT 1

BARNES & THORNBURG LLP

Amax, Inc. and WorkTools, Inc.

v.

ACCO Brands Corp.,

C.A. No. 16-10695-NMG

Markman Hearing

October 5, 2017

Technology Tutorial

- Staplers have been around for over a century.
- Desktop staplers are used in office and home settings to staple together sheets of paper.
- In 1939, Swingline® revolutionized the stapling world when it introduced a stapler that allowed the user to drop a strip of staples into the stapler. Shortly thereafter, all desktop staplers in the U.S. began using a similar size of staple strips, a practice that continues today.

Common Stapler Parts

- Handle
- Base that rests on a desk
- Structure that holds a strip of staples
- Striker that contacts a staple in a staple strip
- Anvil below the striker that forms and clinches two arms of the U-shaped staple

Stapling Operation Has Four Parts

Conventionally, as described by the prior art Perez patent, the stapling operation has four parts:

1. Downward motion of the handle until the magazine holding the staples touches the material to be stapled
2. Release of an individual staple from the strip of staples by the striker and onward motion of the separated staple until the staple contacts the paper
3. Penetration of the ends of the staple into the paper and the paper being pierced through
4. Bending the ends of the staple over on the back of the paper by pressure against the anvil

Factors Affecting Needed Force

Many factors other than the stapler itself affect the amount of force needed to complete the stapling operation:

- Type of paper
- Number of sheets of paper
- Type of staple
- The way the staple is joined in the strip
- Metallurgy and point geometry of the staple
- Speed with which the user moves the handle

The asserted patents acknowledge that "Empirical information suggests that a conventional stapler requires peak forces of 15 to 30 pounds, **depending on the number of paper sheets to be fastened**."

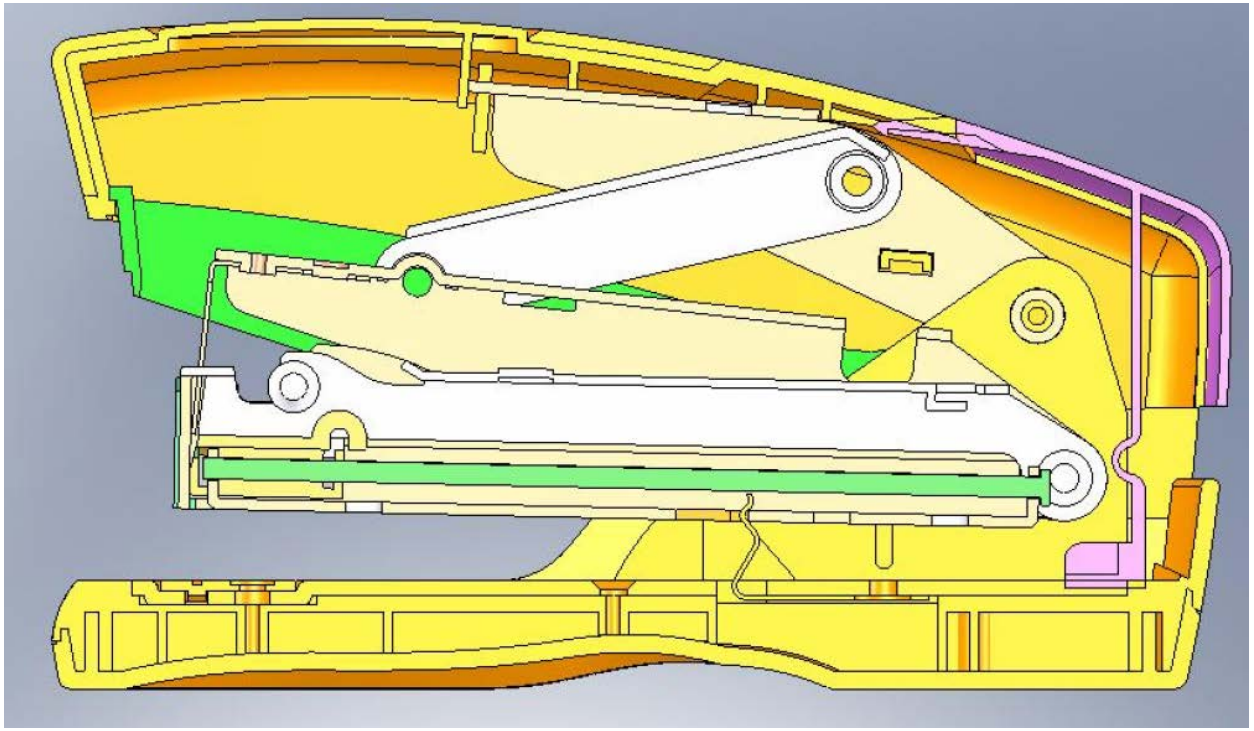
Types of Low Force Staplers

There are several ways to lower the force needed to complete the stapling operation, all of which were known in the prior art.

You can simply use a longer handle to improve leverage.

Types of Low Force Staplers

You can use a mechanical leverage system like the Swingline Light Touch stapler:



Types of Low Force Staplers

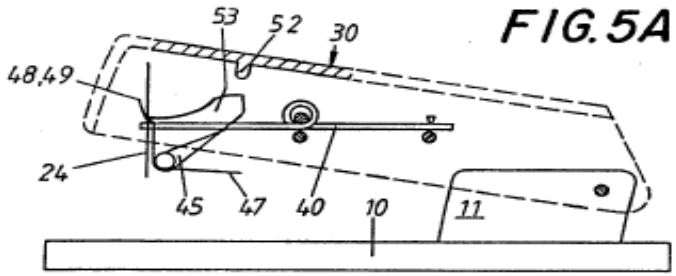
Stored energy. The asserted patents relate to a stored energy stapler using a spring to store the energy. The patents admit that such a system is not new:

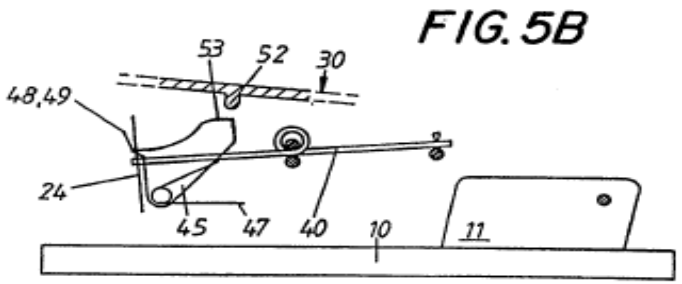
> "It is desirable to limit the peak force required. An effective way to do this is to accumulate the total energy needed to install the staple and then release that energy all at once by striking the staple in an impact blow. **This is a type of action commonly used in staple gun tackers.** A handle is pressed through a range of motion causing a spring to store energy. The stored energy is suddenly released at a predetermined handle position." '589 patent, col. 1, ll. 34-41

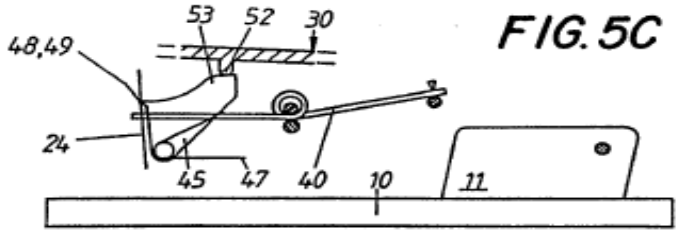
Types of Low Force Staplers

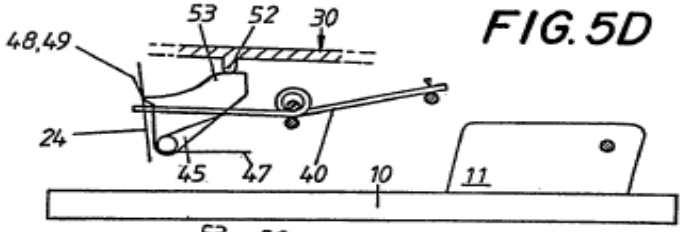
The asserted patents say that stored energy was commonly used in staple gun tackers. But the prior art shows that stored energy was also well-known for desktop staplers.

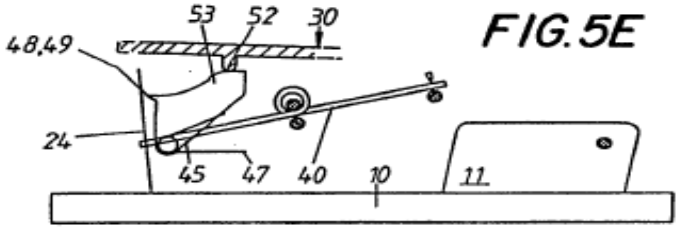
Prior art U.S. Patent No. 5,356,063 to Perez – Embodied by the NOVUS stapler:

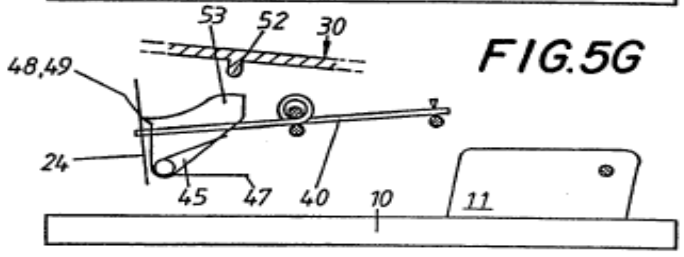






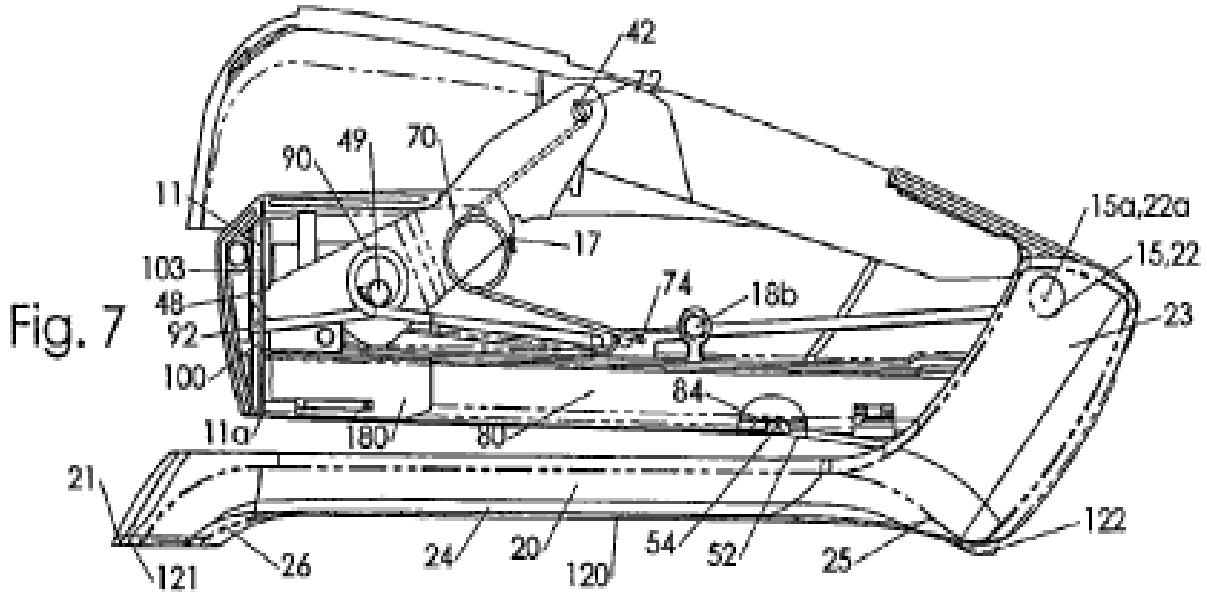




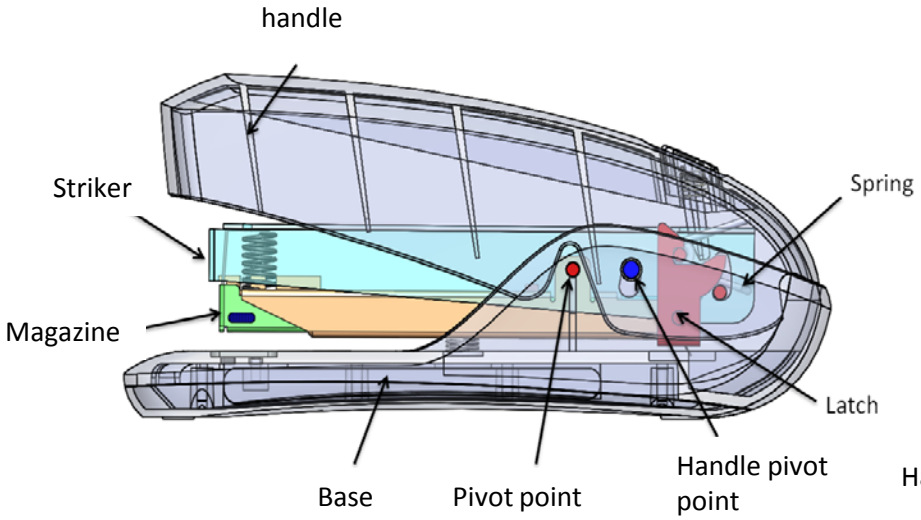


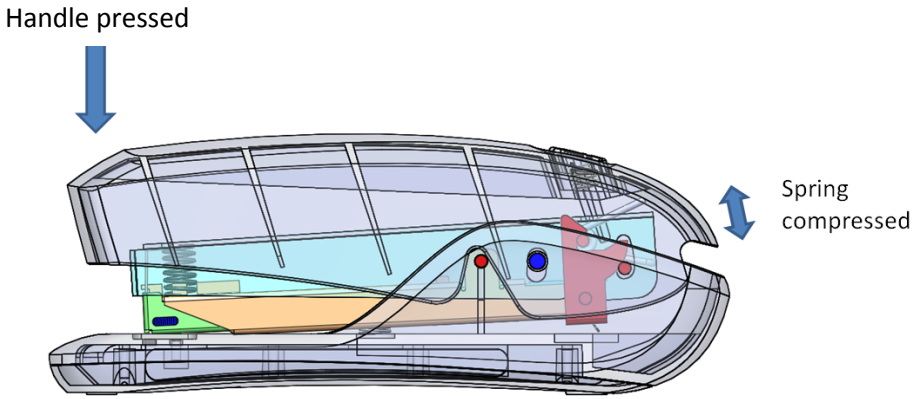
Similar Stapler Described in the Asserted '589 and '709 Patents

Fig. 7



Different Mechanism Used in the Accused Quick Touch Staplers





1. "handle" / "body" / "base"

Term(s)	Plaintiffs' Proposed Construction	Defendant's Proposed Construction
"a handle"	"structure the user presses (or grips) when using the stapler"	"a structure separate from the body or base that the user presses (or grips) to operate the stapler"
"a body"	"structure to support and position components of the stapler"	"a multipart structure separate from the handle or base that houses, supports, and positions components of the stapler"
"a base"	"structure that supports the stapler"	"a structure separate from the body or handle that supports the stapler"

1. "handle" / "body" / "base"

- Dispute: are the "handle" / "body" / "base"

  SEPARATE or UNITARY
- Listed as separate in every claim and in the specification
- Must be separate structures for the claims to make sense
- Plaintiffs admitted they were separate in the intrinsic record

1. "handle" / "body" / "base"

Staples litigation brief submitted to PTO and part of the intrinsic record:

Instead, Defendants mistakenly rely upon a portion of the specification which expressly refers to "a body rest position" (emphasis added). The claim, on the other hand, refers to a rest position for the "handle" and not for the "body." As shown in the annotated Figure 1 from the `709 patent reproduced to the right, the handle 30 (in green) is a separate structure that can move relative to the body 10 (in blue). Defendants' reliance on the rest position of the "body" is misplaced because it confuses the claimed handle with the separately claimed body.

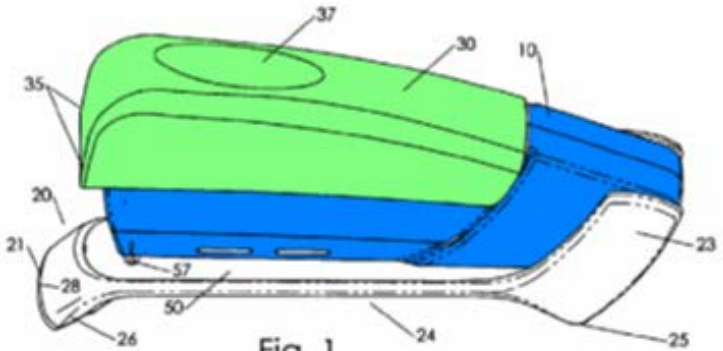
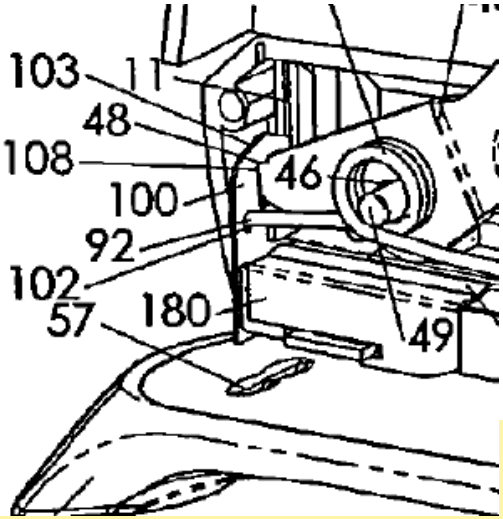


Fig. 1

2. "[a striker moving within] a channel of the body"

Exemplary Patent Claim(s)	Plaintiffs' Proposed Construction	Defendant's Proposed Construction
'589 patent, claim 1	No further construction needed	"an at least partially enclosed passage in the body"

- Plain and ordinary meaning of channel is an enclosed passage
- Consistent with "striker channel 11" in Fig. 5



2. "[a striker moving within] a channel of the body"

- Consistently described in the patent as a "U"-shaped passage (col. 2, ll. 13, 33, and 45)

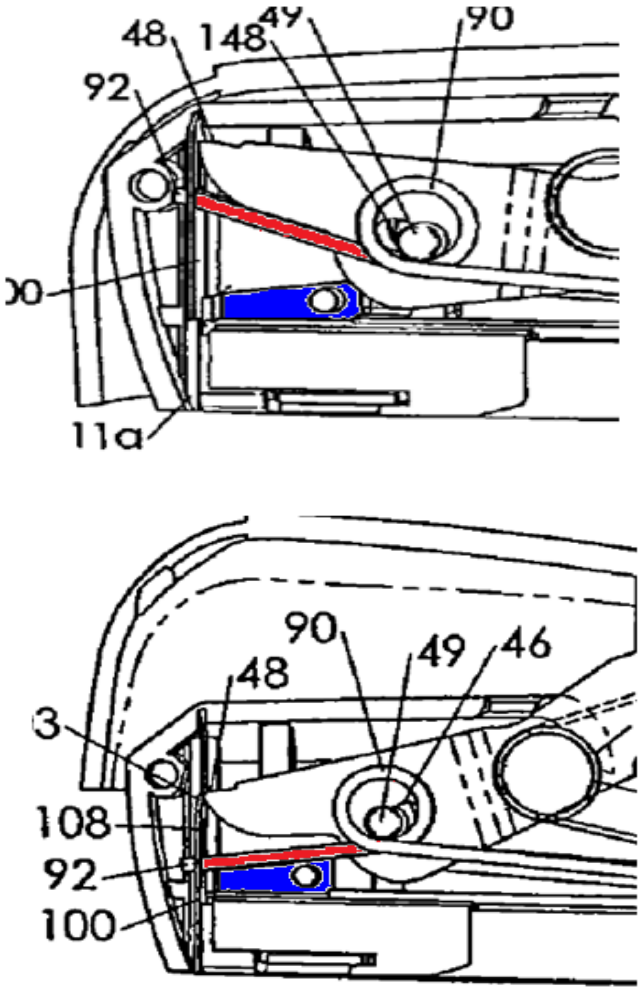
- Channel must be at least partially enclosed for the striker to move ***within*** it

3. "a bumper [that provides a stop for the power spring]"

Plaintiffs' 5/29/17 Construction	Plaintiffs' 6/30/17 Construction	ACCO's Construction
No construction	Structure that provides a stop for the power spring	A device for absorbing shock

3. "a bumper [that provides a stop for the power spring]"

Figs. 10 and 11 (right) show: "Bumper **146** provides a stop for power spring **90**, FIGS. 6 and 25. The impact force from spring **90** is directed toward the outer portions of housing **10** since the power spring is in two separate spaced arms at striker **100**."



3. "a bumper [that provides a stop for the power spring]"

- The claim language already includes Plaintiffs' proposed construction
- So Ps' proposal just replaces "bumper" with "structure," reading the term bumper out of the claims because any structure could be a bumper
- ACCO's proposal is the plain and ordinary meaning of "bumper" to a person in the art consistent with the specification—a device that absorbs shock
- Dictionary definitions merely confirm this

4. "Handle rest position"

Plaintiffs' *Staples* Construction	Plaintiffs' 5/29/17 Construction	Plaintiffs' 6/30/17 Construction	ACCO's Construction
the position of the handle wherein the handle is at a farthest position away from the base before the power spring is deflected	No construction	the handle is moved to a position farthest away from the body	the position of the handle wherein the handle pressing area is at a farthest position away from the base

ACCO's construction is consistent with the previous construction of the same term in the *Staples* litigation

No compelling reason to change "base" to "body"–handle pressing area that is farthest from base is also farthest from body

Inclusion of "handle pressing area" specifies which portion of the handle is farthest from the base, consistent with the claims and specification

5. "pre-release position"

Plaintiffs' *Staples* Construction	Plaintiffs' 5/29/17 Construction	Plaintiffs' 6/30/17 Construction	ACCO's Construction
the position of the handle wherein the power spring causes the striker under bias from the power spring to eject a staple out of a staple loading chamber	No construction	The position of the handle immediately before the striker, under bias of the power spring, is freed to eject a staple	The position of the handle/striker wherein the power spring causes the striker under bias from the power spring to eject a staple out of a staple loading chamber

- ACCO's construction is consistent with Plaintiffs' own prior proposal in *Staples*; Plaintiff's most recent proposal is **not**. ACCO's construction merely adds "/striker" to clarify that certain claims refer to the "pre-release position" of the entire stapler not just the handle (*see* Claims 4 and 16).
- ACCO's construction is also consistent with the claim language and specification (*e.g.,* Claim 1: "substantially at the pre-release position of the handle, the striker under bias from the power spring ejects the staple from the staple loading chamber;" *see also* Claims 2, 7, and 16); Plaintiffs' proposal is **not**.

6. "a lever"

Plaintiffs' Construction	ACCO's Construction
No construction	A separate structure in the stapler that pivots about one point and this is used to move an object at a second point by a force applied at a third

- ACCO's construction is consistent with the plain and ordinary meaning of "lever" to those skilled in the art. *See* Ex. H ("a rigid bar used to exert a pressure or sustain a weight at one point of its length by the application of a force at a second and turning at a third on a fulcrum"); Ex. I ("a rigid bar, pivoted about a fixed point (fulcrum), used to multiply force or motion").
- ACCO's construction is also consistent with the specification, which describes a lever (40) as a separate structure in the stapler pivoting about one point ('589 patent, 6:54-55) used to move an object at a second point (*see id.*, Fig. 8, striker 100) by a force applied at a third point (*id.*, 7:60-61).
- ACCO need not show lexicography or disavowal: separately listed claim elements clearly imply "distinct components of the patented invention." *Becton*, 616 F.3d at 1254 (internal quotation omitted).

7. "a desktop stapler to be gripped by a user's fingers"

"wherein a user's hand normally operates the stapler by lifting the stapler off of a resting surface and squeezing the stapler between the handle at the pressing area and an underside of the base"

"wherein a user's hand normally operates the stapler by lifting the stapler off a resting surface and squeezing the stapler between the handle at the pressing area and an underside of the base"

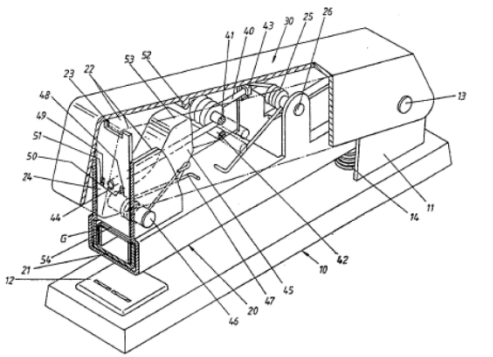
Plaintiffs' Construction	ACCO's Construction
No construction	Excludes staplers with a flat base

7. Gripping/Squeezing by User's Fingers/Hand

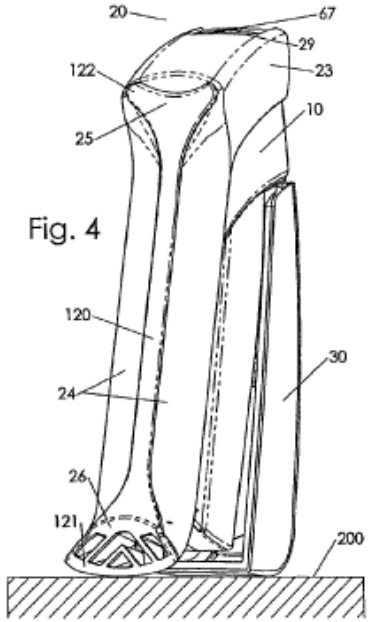
Plaintiffs' Construction	ACCO's Construction
No construction	Excludes staplers with a flat base

- Claims 2, 7, 10, and 19 recite hand-held staplers, as contrasted with desktop staplers (*compare, e.g.*, Claim 16).

- During prosecution, Plaintiffs expressly distinguished prior art by arguing that "**[t]he flat base of Perez** suggests its stapler is meant to be used while resting on a desktop and **not meant to be picked up**." (Ex. R at 10.) These arguments used to obtain issuance of the patent cannot now be ignored in Plaintiffs' attempt to recapture staplers with flat bases that are meant to be used while resting on a desktop and not meant to be picked up as being within Claims 2, 7, 10, and 19.



Perez, Fig. 3



'589 Patent

8. Apparatus claims indefinite for including method steps

- A patent claim that recites "both an apparatus and a method of using that apparatus" is "render[ed] indefinite under section 112, paragraph 2." *IPXL Holdings v. Amazon.com,* 430 F.3d 1377 (Fed. Cir. 2005)
- An apparatus claim is indefinite where the language used "is directed to **user** actions, not system capabilities." *In re Katz*, 639 F.3d 1303, 1318 (Fed. Cir. 2011)

8. Apparatus Claims Indefinite for Containing Method Steps

The claims repeatedly employ the word "user" because the claims are directed to user actions:

- "the **user's** fingers squeeze the handle at the pressing area and grip an underside of the base with a squeezing force" ('589 patent, claim 2)
- "a **user's** hand normally operates the stapler by lifting the stapler off of a resting surface and squeezing the stapler between the handle and an underside of the base" (claim 10)
- "a **user's** hand may normally and easily press the handle at the pressing area from the rest position to the pre-release position by fingertips of an extended hand" (claim 16)
- "an average peak force from the **user's** fingertips acting on the handle pressing area to complete a cycle of ejecting, installing, and folding the staple within the anvil to bind the stack of papers is substantially less than about 15 lbs." (claim 16)
- "a **user's** hand normally operates the stapler by lifting the stapler off of a resting surface and squeezing the stapler between the handle at the pressing area and an underside of the base" (claim 19)

8. Apparatus Claims Indefinite for Containing Method Steps

Even those claims that do not include the word "user" require user action.

Claim 7, for instance, requires "a peak force squeezing on the handle to complete a cycle of ejecting and installing a staple to bind the stack of papers is less than about 15 lbs."

This action can only be directed by a user—only a user can squeeze the handle.

This is a method step.

Indefiniteness Post-*Nautilus*

(Asserted Patents Granted Pre-Nautilus)

- Indefinite if "claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).
- For claim terms requiring measurement, "the patent and prosecution history must disclose a single known approach or establish that, where multiple known approaches exist, a person having ordinary skill in the art would know which approach to select." *Dow Chem. Co. v. Nova Chems. Corp. (Canada)*, 803 F.3d 620, 630–31 (Fed. Cir. 2015).
- *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 789 F.3d 1335, 1341 (Fed. Cir. 2015) (holding claim indefinite where molecular weight could be measured three different ways and would yield different results and the patent and prosecution history did not provide guidance as to which measure to use).

9. "a user's hand may normally and easily press the handle at the pressing area from the rest position to the pre-release position by fingertips of an extended hand"

- "easily" is subjective—different sized human hands with different strengths
- What is "easy" to one person is not "easy" to another
- "[w]hen a 'word of degree' is used, the court must determine whether the patent provides 'some standard for measuring that degree.'" *Biosig Instruments, Inc., v. Nautilus, Inc.*, 783 F.3d 1374, 1378 (Fed. Cir. 2015).
- Otherwise, the POSITA is left "to consult the unpredictable vagaries of any one person's opinion." *Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1370 (Fed. Cir. 2014)
- Here, the patent fails to provide any standard for measuring if pressing the handle is "easy"

10. Force Limitations

E.g., '589 Patent, Claim 7:

> "a peak force squeezing on the handle to complete a cycle of ejecting and installing a staple to bind the stack of papers is less than about 15 lbs."

Two fatal problems:

(1) No known approach to measure the force

(2) "[substantially] less than about 15 lbs." provides no objective boundary

10. Force Limitations – No known approach to measure the force

Patent does not teach:

- How to measure force?
- What measuring apparatus to use?
- What measuring instrumentation to use?
- Where on the handle to apply the force?
- What type of staple to use?
- How many sheets of paper to use in the test?

But for claim terms requiring measurement, "the patent and prosecution history must disclose a single known approach or establish that, where multiple known approaches exist, a person having ordinary skill in the art would know which approach to select." *Dow Chem. Co. v. Nova Chems. Corp. (Canada)*, 803 F.3d 620, 630–31 (Fed. Cir. 2015).

10. Force Limitations – No known approach to measure the force

- Plaintiffs cite only one place in the patent that allegedly describes how to measure force.
- They say "the specification provides guidance on measuring force. (*See, e.g.,* '589 patent, Col. 1, ll. 46-49.)" Dkt. No. 101 at 14.
- Col. 1, ll. 46-49:

> striker. In a common direct acting desktop stapler the handle front end moves exactly as the staple moves. This means that, for example, 15 lbs. to force a striker, thus a staple, to move 1 mm requires 15 lbs. to move the handle that same 1 mm. If the

10. Force Limitations – No known approach to measure the force

- Nothing in ACCO's Noninfringement Contentions is to the contrary.
- Plaintiffs argue that the terms must be definite because ACCO denied meeting the limitations.
- But let's look at the actual text of ACCO's contentions to see WHY ACCO denied:

> The SQT Staplers do not meet this limitation. Plaintiffs' Infringement Contentions fail to show infringement at least because the Contentions provide no test method or results, nor were test method or results documents produced with the Contentions, as required by the Local Rules and the Schedule agreed to by the parties. ACCO reserves the right to supplement and amend this contention once Plaintiffs provide their complete contention.

(Dkt. No. 101-2 at 22.)

10. Force Limitations - "[substantially] less than about 15 lbs." provides no objective boundary

- "When a 'word of degree' is used, the court must determine whether the patent provides 'some standard for measuring that degree.'" *Biosig Instruments v. Nautilus,* 783 F.3d 1374, 1378 (Fed. Cir. 2015)*; see also Interval Licensing*, 766 F.3d 1364, 1371-72 (Fed. Cir. 2014).
- Nothing in the specification, prosecution history, or prior art that would inform a person of skill in the art what range of force is included within "less than about 15 lbs."
- Therefore, the term is indefinite.

11. Handle Travel Limitations

E.g., '589 Patent, Claim 1: "wherein the handle at the pressing area moves about 0.9 to 1 inch inclusive toward the body as the handle moves from the rest position to the pre-release position"

E.g., Claims 7 and 16: "the handle, at the handle pressing area above the striker, moves toward the body a distance between the handle rest position and the handle pre-release position that is substantially greater than the striker travel distance"

- For claim terms requiring measurement, "the patent and prosecution history must disclose a single known approach or establish that, where multiple known approaches exist, a person having ordinary skill in the art would know which approach to select." *Dow Chem.*, 803 F.3d at 630–31 (holding that claim term "a slope of strain hardening coefficient greater than or equal to 1.3" is indefinite).
- "The question is whether the existence of multiple methods leading to different results without guidance in the patent or the prosecution history as to which method should be used renders the claims indefinite." *Dow Chem.,* 803 F.3d at 634.

11. Handle Travel Limitations

- Fatal deficiency: the patent provides no method to measure the handle travel distance
- The *Staples* Court looked at the same specification and same limitation and found:

  "There is nothing in the claims language or specification to suggest the proper method of measuring the handle travel distance." *Accentra Inc. v. Staples, Inc.*, 851 F. Supp. 2d 1205, 1215 (C.D. Cal. 2011).

- Just because the experts in *Staples* found at least four different ways to measure handle travel does not save the terms.
- *Dow Chemical* (holding that although "Dow's expert Dr. Hsiao, a person skilled in the art, had developed a method for measuring maximum slope," "[u]nder *Nautilus* this is no longer sufficient.")
- *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 789 F.3d 1335, 1341 (Fed. Cir. 2015) (holding claim indefinite where molecular weight could be measured three different ways and would yield different results and the patent and prosecution history did not provide guidance as to which measure to use).

12. "Stack of papers"

While the patent mentions a stack of papers being pierced and bound by a staple, it fails to specify

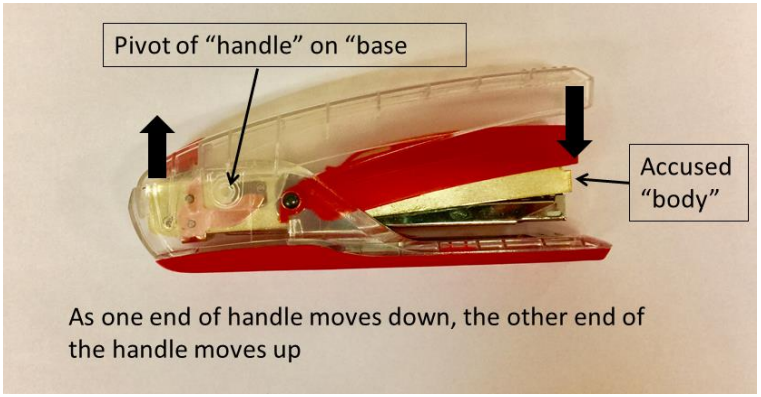
(i) how many sheets of paper are in a stack? or

(ii) what type a paper needs to be pierced and bound?

Without this knowledge, a person of skill in the art has no way to determine if this limitation is met or whether a given stapler would be operable to bind a "stack of papers."

13. Limitations concerning handle substantially nearest/near/far/closest/ toward/away from the body

- E.g., "589 patent, Claim 1: "wherein the handle includes a handle rest position where the handle is moved to a position farthest away from the body"
- A person of skill in the art is left to guess what portion of the "handle" must be positioned relative to what portion of the "body."



- Part of the "handle" is moving toward the accused "body" while another part is simultaneously moving away
- If not indefinite, the term must be limited such that every part of the handle has the claimed orientation. In claim 1 for example, the entire handle at the handle rest position would need to be in "a position farthest away from the body."